Wildlife Mixed Conifer Stands Habitat Type Groups 4, 5, and 6 Nez Perce-Clearwater Forests

	Stand Initiation		Stem Exclusion		Understory Reinitiation	Old Forest	
Stand Characteristic	**Seedling 1-10 years**	**Sapling 10-25 years**	**Pole 25-70 years**	**Immature Sawtimber 70-100 years**	**Mature Sawtimber 100-150 years**	**Old/mature >150 years**	**Rational**
Large Down Wood (Pieces)							Size is based on Bollenbacher 2009; late seral conditions would have 9 snags/ac >15" and 5 snags/ac >20". These would be the large trees producing large down wood in the early seral stage. Length is based on FP snag definition. Various decay classes through time. Early seral stands will have earlier decay classes because later decay classes will be consumed by Rx Fire and we will recruit green retention trees through windfall. As time goes on, decay will increase. We will begin picking up early decay classes again in immature sawtimber stage as snag develop and fall.
15-20"DBH & 40 ft long	5	5	5	7	7	7	
>20" DBH & 40 Ft long	2	3	3	2	3	4	
Snags should be >Avg DBH at Maturity (#/Ac)							Based on Bollenbacher 2009; distributed in clumps and individual trees and/or associated with green tree retention. Favor PP/WL and leaving the largest snags/trees of other species. Assumes recruitment from 30% of green trees retained after prescribed fire. Large woody debris (>3") for soils also considered based on desired tons/acre for these habitat type groups. Height is based on FP snag definition.
20"DBH & 40 ft tall	**5**	**5**	**5**	**6**	**8**	**10+**	
>20" DBH & 40 ft tall	**3**	**3**	**3**	**4**	**5**	**5**	
Legacy Trees Retention	>10	>10	>10	>10	>10	>10	In general, all obvious legacy trees should be retained. If less than 10 per acre exist, leave the largest trees available. Based on Green et al. and VRU descriptions we would have >10 legacy trees surviving over 150 years. Assumes 30% mortality from Rx fire, which contributes to large snag objectives. Retained in clumps and individuals with no more than 2 acres void of retention. Clumps (5-10+ trees) should include snags. Retained trees are the largest in the stand favoring early serals where they exist and leaving other species to achieve desired retention levels.
Green Tree Retention >21" or > Avg DBH at Maturity - whichever is greater (#/AC)	14-28	11-22	11-22	11-22	15-25+	60-150+	
Overstory Canopy Closure	15-25%	10-15%	>10%	>10%	>10+%	>70%	This is a guess based on maximum canopy cover of 20% to grow early serals. I heard up to 35% could be acceptable. Early seral stands should have the maximum canopy cover that allows early serals to grow well. This allows silv objectives to be met and leaves structure in the developing stand for other resource needs.
Browse	High	Mod/High	Moderate	Low/Mod	Low	Low-Mod	Browse would be abundant in early seral stands and progressively decline as stands age and canopy cover increases. Browse is maintained at low-mod levels in old stands as dead and dying trees create canopy gaps. Mature stands may be depauperate until canopy gaps are created. Browse is short-term in high productivity sites.
Hiding Cover	Low	Mod	High	High	Mod/High	Mod/High	Hiding cover progresses from low to high as stands develop.
Thermal Cover	Low	Low	Low/Mod	Mod	High	High	Thermal cover progresses from low to high as stands develop.
Deciduous Trees Development and Wildlife Value	Low	Mod	Mod-High	High	Low-Mod	Low	Retain representation of hardwoods/deciduous trees present in unmanaged early-mid seral stands. The cycle of these trees should be maintained; trees would be present early and dead/decaying trees would occur in later stages as they are overtopped by conifers.
Pacific Yew Development and Wildlife Value	Low	Mod	Mod-High	High	High	High	Pacific yew does not tolerate canopy cover removal or burning. It is a late-stage, understory species tied to Moose winter range. Tree form is unique on the Nez Perce Forest. Possibly unique on the Clearwater although CNF has moister habitats and may have more yew trees.

There is a break between mature sawtimber and old forest because we assume the overstory of the cohorts have merged in the old forest condition.
Adaptive Management Monitoring Required. We can monitor stand conditions during pre-harvest exams, post-harvest exams, soil monitoring, BMP monitoring, Forest Plan monitoring. Use photo guides for down wood.